

# EBE

FRAME SERIES



PERFORMANCE  
SPECIFICATIONS.



## EBE Door - Double Panel (Inswing OR Outswing)

Characteristic	Standards	Class	Assessment of Classification
<b>Air Permeability</b>	EN 1026 (Test) EN 12207 (Classification)	3	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 2.25 m <sup>3</sup> /hm Overall Area Permeability → 9.0 m <sup>3</sup> /hm <sup>2</sup>
<b>Water Permeability</b> A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	2A	Watertight up to pressure to 50 Pa (1.04 psf) Watertight up to wind speed of 32.4 km/h (20.2 mph)
<b>Wind Load Resistance (DP)</b>	EN 12211 (Test) EN 12210 (Classification)	C4	Frame deflection at 1600 Pa (33.4 psf) ≤ 1/300
<b>Acoustic Insulation Performance</b> Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007 EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Door = 39 dB (-1, -3) Rw IGU (Glass) = 42 dB → Rw Door = 42 dB (-1, -2) At < 3.01 m <sup>2</sup> (32.4 ft <sup>2</sup> ) → Rw Door -0 dB
<b>Thermal Transmittance (U-value) *</b> Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m <sup>2</sup> K → Ut = 1.57 W/m <sup>2</sup> K Ug = 0.17 BTU/ft <sup>2</sup> h°F → Ut = 0.28 BTU/ft <sup>2</sup> h°F
<b>Visual Transmittance *</b>	ANSI/NFRC 100-2014		VT → 0.2954
<b>Solar Heat Gain Coefficient *</b>	ANSI/NFRC 100-2014		SHGC → 0.2307
<i>Test Unit Type: Double Panel</i>		<i>Test Unit Size (area): 5.76 m<sup>2</sup> (62.0 ft<sup>2</sup>)</i>	
		<i>* Averaged Value</i>	

**Important:** European testing labs do not consider a threshold or a sill when performing their tests on hinged doors. With that said, the results herein for Air permeability, Water permeability and Wind Load Resistance do not accurately represent the performance you should expect from our inswing and outswing doors. If you are using a drop seal or a threshold with compression gasket, refer to the specifications for our inswing and outswing EBE series casement windows.

## EBE Door - Two Leaf Lift and Slide

Characteristic	Standards	Class	Assessment of Classification
<b>Air Permeability</b>	EN 1026 (Test) EN 12207 (Classification)	4	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 2.25 m <sup>3</sup> /hm Overall Area Permeability → 9.0 m <sup>3</sup> /hm <sup>2</sup>
<b>Water Permeability</b> A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	8A	Watertight up to pressure of 450 Pa (9.4 psf) Watertight up to wind speed of 97 km/h (60.3 mph)
<b>Wind Load Resistance (DP)</b>	EN 12211 (Test) EN 12210 (Classification)	C3	Frame deflection at 1200 Pa (25.1 psf) ≤ 1/300
<b>Acoustic Insulation Performance</b> Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007		Rw IGU (Glass) = 52 dB → Rw Door = 43 dB (-1, -4)
<b>Thermal Transmittance (U-value) **</b> Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 0.6 W/m <sup>2</sup> K → Ut = 1.10 W/m <sup>2</sup> K Ug = 0.11 BTU/ft <sup>2</sup> h°F → Ut = 0.19 BTU/ft <sup>2</sup> h°F
<b>Visual Transmittance **</b>	ANSI/NFRC 100-2014		VT → 0.2954
<b>Solar Heat Gain Coefficient **</b>	ANSI/NFRC 100-2014		SHGC → 0.2307
<i>Test Unit Type: Two Leaf Lift and Slide / Test Unit Size (area): 7.20 m<sup>2</sup> (77.5 ft<sup>2</sup>)</i>		<i>* Averaged Value    ** Dependent on Glass and Glazing Type</i>	

### › EBE Window - Single Sash (Inswing OR Outswing Casement)

Characteristic	Standards	Class	Assessment of Classification
<b>Air Permeability</b>	EN 1026 (Test) EN 12207 (Classification)	4	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 0.75 m <sup>3</sup> /hm Overall Area Permeability → 3.0 m <sup>3</sup> /hm <sup>2</sup>
<b>Water Permeability</b> A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	9A	Watertight up to pressure of 600 Pa (12.5 psf) Watertight up to wind speed of 112 km/h (69.6 mph)
<b>Wind Load Resistance (DP)</b>	EN 12211 (Test) EN 12210 (Classification)	C5 B5	Frame deflection at 2000 Pa (41.8 psf) ≤ 1/300 Frame deflection at 2000 Pa (41.8 psf) ≤ 1/200
<b>Acoustic Insulation Performance</b> Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007  EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 47 dB → Rw Window = 43 dB (-2, -5) At < 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) → Rw Window -0 dB 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) < At < 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) → Rw Window -1 dB 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) < At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -2 dB At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -3 dB
<b>Thermal Transmittance (U-value) **</b> Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m <sup>2</sup> K → Ut = 1.16 W/m <sup>2</sup> K Ug = 0.17 BTU/ft <sup>2</sup> h°F → Ut = 0.20 BTU/ft <sup>2</sup> h°F
<b>Visual Transmittance **</b>	ANSI/NFRC 100-2014		VT → 0.2954
<b>Solar Heat Gain Coefficient **</b>	ANSI/NFRC 100-2014		SHGC → 0.2307
Test Unit Type: Single Casement / Test Unit Size (area): 2.88 m <sup>2</sup> (31.0 ft <sup>2</sup> )		* Averaged Value	** Dependent on Glass and Glazing Type

### › EBE Window - Double Sash (Inswing OR Outswing Casement)

Characteristic	Standards	Class	Assessment of Classification
<b>Air Permeability</b>	EN 1026 (Test) EN 12207 (Classification)	4	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 2.25 m <sup>3</sup> /hm Overall Area Permeability → 9.0 m <sup>3</sup> /hm <sup>2</sup>
<b>Water Permeability</b> A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	9A	Watertight up to pressure of 600 Pa (12.5 psf) Watertight up to wind speed of 112 km/h (69.6 mph)
<b>Wind Load Resistance (DP)</b>	EN 12211 (Test) EN 12210 (Classification)	C4 B4	Frame deflection at 1600 Pa (33.4 psf) ≤ 1/300 Frame deflection at 1600 Pa (33.4 psf) ≤ 1/200
<b>Acoustic Insulation Performance</b> Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007  EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 47 dB → Rw Window = 43 dB (-2, -5) At < 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) → Rw Window -0 dB 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) < At < 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) → Rw Window -1 dB 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) < At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -2 dB At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -3 dB
<b>Thermal Transmittance (U-value) **</b> Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m <sup>2</sup> K → Ut = 1.16 W/m <sup>2</sup> K Ug = 0.17 BTU/ft <sup>2</sup> h°F → Ut = 0.20 BTU/ft <sup>2</sup> h°F
<b>Visual Transmittance **</b>	ANSI/NFRC 100-2014		VT → 0.2954
<b>Solar Heat Gain Coefficient **</b>	ANSI/NFRC 100-2014		SHGC → 0.2307
Test Unit Type: Double Casement / Test Unit Size (area): 5.76 m <sup>2</sup> (62.0 ft <sup>2</sup> )		* Averaged Value	** Dependent on Glass and Glazing Type

## EBE Window - Casement with Fixed Window (Inswing OR Outswing Casement + Fixed)

Characteristic	Standards	Class	Assessment of Classification
<b>Air Permeability</b>	EN 1026 (Test)	4	Airtight up to pressure of 600 Pa (12.5 psf)
	EN 12207 (Classification)		Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 0.75 m <sup>3</sup> /hm Overall Area Permeability → 3.0 m <sup>3</sup> /hm <sup>2</sup>
<b>Water Permeability</b> A → Non-shielded test	EN 1027 (Test)	E1050	Watertight up to pressure of 1050 Pa (21.9 psf)
	EN 12208 (Classification)		Watertight up to wind speed of 148.85 km/h (92.5 mph)
<b>Wind Load Resistance (DP)</b>	EN 12211 (Test)	C5	Frame deflection at 2000 Pa (41.8 psf) ≤ 1/300
	EN 12210 (Classification)	B5	Frame deflection at 2000 Pa (41.8 psf) ≤ 1/200
<b>Acoustic Insulation Performance</b> Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 47 dB → Rw Window = 43 dB (-2, -5)
	EN 14351-1:2006+A1:2010		At < 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) → Rw Window -0 dB 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) < At < 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) → Rw Window -1 dB 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) < At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -2 dB At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -3 dB
<b>Thermal Transmittance (U-value) **</b> Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006		Ug = 1.0 W/m <sup>2</sup> K → Ut = 1.16 W/m <sup>2</sup> K
	EN ISO 10077-2:2006		Ug = 0.17 BTU/ft <sup>2</sup> h°F → Ut = 0.20 BTU/ft <sup>2</sup> h°F
	EN 14351-1:2006+A1:2010		
<b>Visual Transmittance **</b>	ANSI/NFRC 100-2014		VT → 0.2954
<b>Solar Heat Gain Coefficient **</b>	ANSI/NFRC 100-2014		SHGC → 0.2307

Test Unit Type: Casement with Fixed Window / Test Unit Size (area): 3.60 m<sup>2</sup> (38.75 ft<sup>2</sup>)

\* Averaged Value

\*\* Dependent on Glass and Glazing Type

Test Sash Size (area): 2.25 m<sup>2</sup> (24.22 ft<sup>2</sup>)

## EBE Window - Hopper over Fixed Window (Inswing Casement + Fixed)

Characteristic	Standards	Class	Assessment of Classification
<b>Air Permeability</b>	EN 1026 (Test)	4	Airtight up to pressure of 600 Pa (12.5 psf)
	EN 12207 (Classification)		Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 0.75 m <sup>3</sup> /hm Overall Area Permeability → 3.0 m <sup>3</sup> /hm <sup>2</sup>
<b>Water Permeability</b> A → Non-shielded test	EN 1027 (Test)	7A	Watertight up to pressure of 300 Pa (6.3 psf)
	EN 12208 (Classification)		Watertight up to wind speed of 79.6 km/h (49.5 mph)
<b>Wind Load Resistance (DP)</b>	EN 12211 (Test) EN 12210 (Classification)	C4	Frame deflection at 1600 Pa (33.4 psf) ≤ 1/300
<b>Acoustic Insulation Performance</b> Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 47 dB → Rw Window = 43 dB (-2, -5)
	EN 14351-1:2006+A1:2010		At < 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) → Rw Window -0 dB 2.7 m <sup>2</sup> (29.1 ft <sup>2</sup> ) < At < 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) → Rw Window -1 dB 3.6 m <sup>2</sup> (38.8 ft <sup>2</sup> ) < At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -2 dB At < 4.6 m <sup>2</sup> (49.5 ft <sup>2</sup> ) → Rw Window -3 dB
<b>Thermal Transmittance (U-value) **</b> Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006		Ug = 1.0 W/m <sup>2</sup> K → Ut = 1.16 W/m <sup>2</sup> K
	EN ISO 10077-2:2006		Ug = 0.17 BTU/ft <sup>2</sup> h°F → Ut = 0.20 BTU/ft <sup>2</sup> h°F
	EN 14351-1:2006+A1:2010		
<b>Visual Transmittance **</b>	ANSI/NFRC 100-2014		VT → 0.2954
<b>Solar Heat Gain Coefficient **</b>	ANSI/NFRC 100-2014		SHGC → 0.2307

Test Unit Type: Hopper over Fixed Window / Test Unit Size (area): 2.67 m<sup>2</sup> (28.7 ft<sup>2</sup>)

\* Averaged Value

\*\* Dependent on Glass and Glazing Type

Test Sash Size (area): 0.98 m<sup>2</sup> (10.5 ft<sup>2</sup>)



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